Rocky Flats Environmental Technology Site

CHEMICAL CHARACTERIZATION PLAN (PACKAGE)

Group 10 CLOSURE PROJECT
(Buildings 125, 763, C130, and T900C)

REVISION 0

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ADMIN RECORD

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1/4

CHEMICAL CHARACTERIZATION PACKAGE

BUILDING(s). Group 10 Cluster (B125, B763, C130, and T900C)

* This characterization package was prepared in accordance with MAN-077-DDCP, D&D Characterization Protocols, and MAN-127-PDSP, Pre-Demolition Survey Plan for D&D Facilities
* RLCP and PDSP Data Quality Objectives were used to develop this characterization package

Instructions

1 Verify characterization activities are on the Plan-of-the-Day (POD)
2 Perform a Pre-Evolution Brief and/or Job Task Brief in accordance with the Site Conduct of Operations Manual
3 Verify personnel have appropriate training for the applicable tasks they will be performing
4 Comply with RWP requirements, if applicable
5 Comply with JHA and facility PPE requirements, as applicable
6 Inform the Facility Manager, or designee, prior to starting characterization activities
7 Follow applicable characterization and sampling procedures
8 Notify Wackenhut Security (x2444) and the Shift Supervisor (x2914), and verify appropriate safety precautions/requirements are followed prior to accessing facility roofs
9 Coordination with the Environmental Restoration Program organization will be required to further characterize underneath facility foundations and slabs prior to removal
10 Collect and maintain all characterization paperwork in the Project File(s), and all electronic data in the appropriate D&D RISS subdirectory

ASBESTOS		
Sample Location	**Estimated Number of Samples**	**Sample location and justification/rational**
B125	30 -- Biased	SITEX Environmental, Inc performed a comprehensive asbestos inspection in Building 125, and prepared a report and Operations and Maintenance Plan dated December 31, 1996 Based on the report and an initial walk-down, several asbestos data gaps were identified, namely, window caulking, caulking on the external sheet-metal siding, roof flashing, and TSI in the plenum area Additional, limited sampling of these suspect materials will be conducted
763 Breezeway	0	In Building 763, no building materials suspected of containing asbestos were located This building is constructed of poured reinforced concrete foundation and floor with masonry block exterior walls The roof is a corrugated metal roof supported by steel I-beams with a rigid styrofoam insulation The metal roofing and metal roof flashing are nailed to bolted down wood Building 763 does not have a ventilation or heating system Building 763 has sixteen 2' x 4' aluminum windows with plastic glazing Hence, no TSI is present
C130	3	In Building C130, no building materials suspected of containing asbestos were located The roofing shingles are tar-impregnated, and may contain asbestos If these shingles contain greater than 1 0 % asbestos, they may be disposed of with the demolition debris as non-friable ACM
T900C	5	Asbestos inspection has not been performed As a result, a comprehensive invasive inspection must be performed Suspect materials such as floor tile & mastic, drywall & ceiling tile, and base cover will be sampled

2

Total Samples	38	The exact sample numbers and locations cannot be determined until a comprehensive, invasive inspection of T900C is performed in accordance with 40 CFR Part 763, Subpart E Sample locations will be specified on sample map(s) during characterization efforts Samples will be obtained in accordance with PRO-653-ACPR, Asbestos Characterization Procedure and 40 CFR 763

BERYLLIUM		
Sample Location	**Number of Samples (smears)**	**Sample location and justification/rational**
125	25 Biased	Based on the Historical Site Assessment Report (HSAR) and Interview Checklists, there is not adequate historical and process knowledge to conclude that beryllium was not used or stored in this building Therefore, limited biased sampling will be conducted based on the square footage of the building
763 Breezeway	5 Biased	Based on the HSAR and Interview Checklists, there is not adequate historical and process knowledge to conclude that beryllium was not used or stored in this building Therefore, biased sampling will be performed
C130	5 Biased	Based on the HSAR and Interview Checklists, there is not adequate historical and process knowledge to conclude that beryllium was not used or stored in this building Therefore, biased sampling will be performed
T900C	5 Biased	Based on the HSAR and Interview Checklists, there is not adequate historical and process knowledge to conclude that beryllium was not used or stored in this building Therefore, biased sampling will be performed
Total Samples	40 Biased	Samples will be obtained at locations specified on sample map(s) in accordance with PRO-536-BCPR, Beryllium Characterization Procedure Biased sample locations will correspond with the most probable areas of dust accumulation (including beryllium dust), assuming airborne deposition

LEAD		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
Group 10 Cluster, all locations	0	Lead sampling is not required in the Group 10 Cluster Based on the HSAR, Interview Checklists, and facility walkdowns, the only potential for a lead hazard would be in the paint For example, no lead-containing solutions were processed in the building However, all paint will remain a part of the infrastructure during demolition and/or disposal, and therefore does not require sampling per Environmental Waste Compliance Guidance No 27, Lead Based Paint (LBP) and LBP Debris Disposal Sampling for lead for IH requirements will be at the discretion of the demolition contractor

RCRA/CERCLA CONSTITIUENTS		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
B125	0	Based on the HSAR, Interview Checklists, and facility walkdowns, no process activities resulting in a release of RCRA constituents or CERCLA hazardous substances occurred in this building Therefore sampling is not required Very small scale (< ½ RQ) incidental releases of liquid mercury have occurred over the years, but the cleanups were thorough, and no residual mercury is expected

3

		to be found in the building Note These buildings contain components that may need to be managed as Regulated Waste during D&D activities, including mercury thermostats, fluorescent light bulbs, circuit boards, and lead-acid batteries Care will need to be taken to ensure these wastes are managed properly
763 Breezeway	0	Based on the HSAR, no constituents of concern are expected to be contained in the physical structure Mercury lamps and light ballasts will be managed as Regulated Waste during D&D activities
C130	0	The HSAR, Interview Checklists, and facility walkdowns of this building indicate no potential for RCRA/CERCLA contamination, therefore no sampling is required
T900C	0	According to historical documents, T900C was used for VOC removal from surface water sites, and gamma spectroscopy of ER samples This facility did not contain any hazardous chemicals greater than RQ quantities There also are no known or reported spills of hazardous chemicals in or around the trailer, therefore, no sampling is necessary
Total Samples	0	

PCBs*		
Sample Location	**Number of Samples**	**Sample location and justification/rational**
B125	7	There is visible staining on the concrete floor around electric motors and compressors in the mechanical room The active compressors in the mechanical room are mounted above a thick steel plate that is visibly covered in oil Other areas are suspect due to the staining Floor staining is also visible in the center of the south loading area floor Core sampling (2" diameter, 2" depth) should be conducted to determine the presence or absence of PCBs (Deeper samples will be taken in the unlikely event that contamination appears to have migrated farther than 2" into the slab) Disposal of the entire slab as PCB remediation waste would likely be more expensive, and would require soil sampling to determine any migration under the slab Six locations were identified for sampling based on stains and the locations Different types of areas were selected One QC sample will also be collected
763 Breezeway	0	Based on the age of the building (1980 construction), it is assumed that PCBs are unlikely to be present in the paint No samples are required
C130	0	The HSAR, Interview Checklists, and facility walkdowns of this building indicate no potential for PCB contamination, therefore no sampling is required
T900C	0	Based on the age of the trailer (1990-era), there is no reason to believe that PCBs were used in the paint Since this would be the only area of concern for this facility, no samples are required
Total Samples	6	Note These buildings do contain materials that may need to be managed as Regulated Waste during D&D activities, such as light ballasts Care will need to be taken to ensure these wastes are managed properly

* PCB ballasts, fluorescent light bulbs, potential mercury switches in thermostats, and mercury vapor light bulbs shall be removed prior to demolition